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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,328	06/19/2001	Tomohiro Sakai	185588/00	2260
466	7590	09/28/2006	EXAMINER	
YOUNG & THOMPSON				HARPER, KEVIN C
745 SOUTH 23RD STREET				ART UNIT
2ND FLOOR				PAPER NUMBER
ARLINGTON, VA 22202				2616

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

cf

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/883,328	SAKAI, TOMOHIRO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kevin C. Harper	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 July 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-9 and 11-14 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-5,9 and 11-13 is/are rejected.
- 7) Claim(s) 6-8 and 14 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Arguments***

Applicant's arguments filed July 7, 2006 have been fully considered and are persuasive. However, upon further consideration, a new ground(s) of rejection is made in view of Burton et al. (US 6,601,128).

***Claim Objections***

1. Claims 3-8 and 11-14 are objected to because in claims 3 and 11, last line, "until then" does not clearly indicate when the substitution of another loop will end. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-5, 9 and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Burton et al. (US 6,601,128).

2. Regarding claims 1 and 9, Burton discloses a loop diagnosis system and method for disk array apparatuses (fig. 1) comprising a recording unit (items 14a and 14b) having several loops (item 20a and 20b; col. 4, lines 4-14) for executing instructions from a host unit (items 4a and 4b) and several recording media (item 16; col. 3, lines 53-59), a loop monitoring unit and loop controller (items 4a and 4b; fig. 5, step 172; col. 6, lines 22-24) for detecting any abnormality in any of the loops for controlling the loops according to the result of the monitoring by the loop monitoring unit (col. 6, lines 24-28; col. 4, lines 42-61), wherein if the loop monitoring unit

detects any abnormality in a specific loop, suspends the execution of any instruction in the specific loop (col. 6, lines 23-24 and 28-33; col. 7, lines 35-40 and 45-49).

3. Regarding claims 3-5 and 11-13, the second loop is substituted to execute the instruction (col. 6, lines 23-25 and 29-34) after the first loop is diagnosed as failed (fig. 5, step 172). The storage array is severed from the loop (col. 6, lines 35-37; note: another controller is used to access a LUN).

***Allowable Subject Matter***

4. Claims 6-8 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and including overcoming the above claim objection.

***Conclusion***

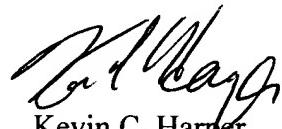
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, can be reached at 571-272-7629. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications associated with a customer number is available through Private PAIR only. For more information about the PAIR system, see portal.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin C. Harper

September 23, 2006